

* SWBAT observe momentum before and after collisions

Sep 6-2:31 PM

Welcome!!!

SECA Physics
Tuesday 9 December 2014

H. Leslie Grebe

- * Pick up:
 - worksheet
 - slip of paper (for later)



Opening Question:

What do you think happens if a big truck runs into a small car that's stopped?

What if a small car runs into a big truck that's stopped?

Centering...

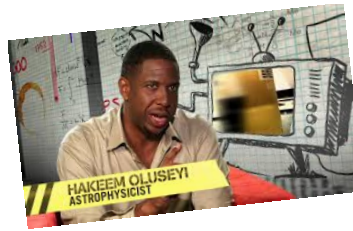
Sep 7-7:04 AM

Daisy Cutter

OAS Show-offs #14 (Nova DVD)

What is a physics term used to explain it?

Definition? MOMENTUM MASS
VELOCITY FORCE
 CONSERVATION



How is this connected to ideas that we've encountered?

BASKETBALL: BIG MASS
 TENNIS BALL: LITTLE MASS

CONSERVATION OF MOMENTUM
 → TOTAL STAYS THE SAME

$$M_v = mV$$

WHIP $\frac{M \cdot v}{m \cdot V}$

Dec 5-9:21 AM

Marble Madness

CONSERVATION:
 BEFORE

RIGHT
 AFTER

Mass x Velocity = Mass x Velocity

$$BALL_1 + BALL_2 = BALL_1 + BALL_2$$



→ TOTAL STAYS SAME

BIG BALL → LITTLE BALL
 BOTH WENT FORWARD

Dec 12-8:22 AM

Daily 3 Questions

CP Hmwk for TODAY
Worksheet #5

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your NAME!!!

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. The end of the whip was going fast because it
 - a. had more mass
 - ☒ b. had less mass
 - c. was magic
2. Conservation of momentum means
 - a. we should use less momentum
 - ☒ b. momentum before a collision = momentum after
 - c. you can never change an object's momentum
3. When the BIG marble hit the LITTLE ...
THEY BOTH WENT FORWARD

Dec 2-7:55 AM